

sub D1> 1. (unchanged) A digital audio/video decoder comprising:

2 a file reader capable of obtaining an encoded audio/video data stream from a data source;

3 a navigator that instructs the file reader to obtain the encoded audio/video data stream;

4 a splitter that separates the encoded audio/video data stream obtained by the file reader

5 into one or more component data streams; and

6 a reprogrammable proxy filter that decodes and converts the one or more component data

7 streams into three or more renderable signals including at least one renderable audio signal and

8 at least two renderable video signals.

1 2. (unchanged) The digital audio/video decoder as recited in claim 1, further comprising a user

2 interface connected to the navigator for selecting the encoded audio/video data stream to be

3 obtained.

1 3. (unchanged) The digital audio/video decoder as recited in claim 2, wherein the user interface

2 further comprises more than one predefined functions for selecting the encoded audio/video data

3 stream to be obtained.

1 ^{B1} 4. (amended) The digital audio/video decoder as recited in claim 3, wherein the more than one
2 predefined functions comprise:

3 a play function;
4 ^{D1} a pause function;
5 a menu function;
6 a stop function;
7 a previous function; and
8 a next function.

1 5. (unchanged) The digital audio/video decoder as recited in claim 1, wherein the one or more
2 component data streams further comprises:

3 an audio data stream;
4 a video data stream;
5 a menu function;
6 a stop function;
7 a previous function; and
8 a next function.

1 6. (unchanged) The digital audio/video decoder as recited in claim 5, wherein the navigator is
2 coupled to the splitter such that the navigator can use the navigation data stream to select the
3 encoded audio/video data stream to be obtained.

1 7. (unchanged) The digital audio/video decoder as recited in claim 1, wherein the
2 reprogrammable proxy filter further comprises:

3 an audio decoder;

4 a video decoder; and

5 a subpicture decoder.

1 8. (unchanged) The digital audio/video decoder as recited in claim 1, wherein the
2 reprogrammable proxy filter can decode and convert a component data stream that conforms
3 to a MPEG coding standard.

1 9. (unchanged) The digital audio/video decoder as recited in claim 1, wherein the
2 reprogrammable proxy filter can decode and convert a component data stream that conforms
3 to a Dolby AC-3 coding standard.

1 10. (unchanged) The digital audio/video decoder as recited in claim 1, wherein the
2 reprogrammable proxy filter can decode and convert a component data stream that conforms
3 to a PCM coding standard.

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1 11. (unchanged) The digital audio/video decoder as recited in claim 1, wherein the
2 reprogrammable proxy filter uses one or more decoding standards to decode and convert the one
3 or more component data streams.

1 12. (unchanged) The digital audio/video decoder as recited in claim 11, wherein the one or
2 more decoding standards can be updated via software.

1 13. (unchanged) The digital audio/video decoder as recited in claim 11, wherein a new
2 decoding standard can be added to the one or more decoding standards via software.

B2 14. (amended) The digital audio/video decoder as recited in claim 1, wherein the three or more
2 renderable signals comprise:

DP a renderable audio signal;

4 a renderable video signal; and

5 a renderable subpicture signal.

1 15. (unchanged) The digital audio/video decoder as recited in claim 14, further comprising a
2 mixer for combining the renderable subpicture signal with the renderable video signal and
3 producing a combined video signal.

1 16. (unchanged) The digital audio/video decoder as recited in claim 1, wherein the
2 reprogrammable proxy filter further comprises a function for synchronizing the three or more
3 renderable signals.

1 17. (unchanged) The digital audio/video decoder as recited in claim 1, further comprising:

2 an audio renderer coupled to the reprogrammable proxy filter and an audio application
3 program interface, the audio rendered controlling the manipulation and rendering of an audio
4 signal from the three or more renderable signals; and

5 a video renderer coupled to the reprogrammable proxy filter and a video application
6 program interface, the video renderer controlling the manipulation and rendering of a video
7 signal from the three or more renderable signals.

1 18. (unchanged) The digital audio/video decoder as recited in claim 17, further comprising:

2 a sound card;

3 a video graphics adapter; and

4 a video driver for receiving the rendered video signal from the video application program
5 interface and controlling the video graphics adapter such that a video output signal is produced
6 from the rendered video signal.

1 19. (unchanged) The digital audio/video decoder as recited in claim 17, wherein the data source
2 is a digital video disk.

20. (unchanged) A digital audio/video decoder comprising:

a file reader capable of obtaining an encoded audio/video data stream from a data source;

a navigator that instructs the file reader to obtain the encoded audio/video data stream;

a user interface connected to the navigator and having one or more predefined functions

for selecting the encoded audio/video data stream to be obtained;

a splitter that separates the encoded audio/video data stream obtained by the file reader into an audio data stream, a video data stream, a subpicture data stream and a navigation data stream;

the navigator being coupled to the splitter such that the navigator can use the navigation data stream to select the encoded audio/video data stream to be obtained;

an audio filter that decodes and converts the audio data stream into a renderable audio signal;

a video filter that decodes and converts the video data stream into a renderable video signal;

a subpicture filter that decodes and converts the subpicture data stream into a renderable subpicture signal;

a mixer for combining the renderable subpicture signal with the renderable video signal and producing a combined video signal;

19 a synchronizing filter for synchronizing the renderable audio signal and the combined
20 video signal;
21 ^{DI} an audio renderer coupled to the audio decoder and an audio application program
22 interface, the audio renderer controlling the manipulation and rendering of an audio signal from
23 the renderable audio signal; and
24 a video renderer coupled to the mixer and a video application program interface, the
25 video renderer controlling the manipulation and rendering of a video signal from the combined
26 video signal.

1 25. (unchanged) A digital audio/video system comprising:

2 a DVD drive;

3 a file reader communicably coupled to the DVD drive to obtain an encoded audio/video

4 data stream from the DVD drive;

5 a navigator communicably coupled to the file reader to instruct the file reader to obtain
6 the encoded audio/video data stream;

7 a splitter communicably coupled to the file reader that separates the encoded audio/video
8 data stream into one or more data streams;

9 a reprogrammable proxy filter communicably coupled to the splitter that decodes and
10 converts the one or more component data streams into three or more renderable signals
11 including at least one renderable audio signal and at least two renderable video signals;

12 a mixer communicably coupled to the reprogrammable proxy filter for combining the
13 at least two renderable video signals and producing a combined video signal;

14 an audio renderer coupled to the reprogrammable proxy filter and an audio application
15 program interface, the audio renderer controlling the manipulation and rendering of the at least
16 one renderable audio signal; and

17 a video renderer coupled to the mixer and a video application program interface, the
18 video renderer controlling the manipulation and rendering of the combined video signal.

1 26. (unchanged) The digital audio/video system as recited in claim 25, further comprising a
2 user interface connected to the navigator for selecting the encoded audio/video data stream to
3 be obtained.

1 27. (unchanged) The digital audio/video system as recited in claim 26, wherein the user
2 interface further comprises more than one predefined functions for selecting the encoded
3 audio/video data stream to be obtained.

1 28. (unchanged) The digital audio/video system as recited in claim 25, wherein the one or more
2 component data streams further comprise:

3 an audio data stream;

4 a video data stream;

5 a subpicture data stream; and

6 a navigation data stream.

1 29. (unchanged) The digital audio/video system as recited in claim 25, wherein the
2 reprogrammable proxy filter further comprises:

3 an audio decoder;

4 a video decoder; and

5 a subpicture decoder.

1 30. (unchanged) The digital audio/video system as recited in claim 25, wherein the
2 reprogrammable proxy filter can decode and convert a component data stream that conforms
3 to a MPEG coding standard.

1 31. (unchanged) The digital audio/video system as recited in claim 25, wherein the
2 reprogrammable proxy filter uses one or more decoding standards to decode and convert the one
3 or more component data streams.

1 32. (unchanged) The digital audio/video system as recited in claim 25, wherein the
2 reprogrammable proxy filter further comprises a function for synchronizing the three or more
3 renderable signals.

1 33. (unchanged) The digital audio/video system as recited in claim 25, further comprising:

2 a sound card;

3 an audio driver for receiving the rendered audio signal from the audio application

4 program interface and controlling the sound card such that an audio output signal is produced

5 from the rendered audio signal;

6 a video graphics adapter; and

7 a video driver for receiving the rendered video signal from the video application program

8 interface and controlling the video graphics adapter such that a video output signal is produced

9 from the rendered video signal.